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ABSTRACT

The Texas State Board of Education adopted the Texas Essential Knowledge and Skills (TEKS) curriculum to ensure that all students meet the challenges of life in the new century. The information in this guide summarizes the TEKS expectations at each grade level in the foundation areas of English Language Arts and Reading, Mathematics, Science, and Social Studies. In table form, TEKS expectations are summarized in these four content areas for kindergarten and grades 1 through 5. (SLD)

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Study guides that can help students strengthen the skills needed to be successful on the Texas Assessment of Academic Skills (TAAS) test are available for grades 3-8 and exit level.

The activities in the study guides cover the same skills that are taught in school and are tested on TAAS. Developing these skills can improve students' abilities to solve problems, read for meaning, write clearly and effectively, and understand key concepts in writing, reading, and mathematics.

Students who do not pass one or more sections of the TAAS will receive a study guide from their schools. Other students or their parents may order the TAAS Study Guide for $5.00 each by calling 1-888-35-STUDY.

1701 North Congress Avenue
Austin, Texas 78701-1494
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Keith Cruse

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Texas Essential Knowledge and Skills

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Every day our world becomes more complex and demanding. To succeed beyond high school, students must be better prepared than at any time in the history of our state. Our expectations for our students and our schools are higher than they have ever been.

To meet these expectations, the State Board of Education has adopted a new curriculum for all Texas schools — the Texas Essential Knowledge and Skills (TEKS). These learning standards will help ensure that all students meet the challenges ahead of us as we move into the next century:

- Each student must become a more effective reader.
- Each student will have to know and apply more complex mathematics.
- Each student needs to develop a stronger understanding of science concepts, especially in biology, chemistry, and physics.
- Each student must master social studies skills and content necessary to be a responsible adult citizen.
- Each student must master a wider range of technology.

The Texas Essential Knowledge and Skills identify what Texas students should know and be able to do at every grade and in every course in the foundation and enrichment areas as they move successfully through our public schools.

The enclosed information summarizes the TEKS at your child's grade level in the four foundation areas of English Language Arts and Reading, Mathematics, Science, and Social Studies.

If you would like to see all of the TEKS that your child will learn, ask a teacher or principal to show you a copy; or order the TEKS from the Texas Education Agency; or, see http://www.tea.state.tx.us/resources/curric.html.

We are proud of the TEKS and hope that you will be proud of what your child will learn and do in school this year.

Mike Moses
Commissioner of Education

Students in grades 3-8 and exit level (before graduation) take the Texas Assessment of Academic Skills (TAAS). This test indicates how much your child learned and helps indicate how well your district is doing. Study guides are available to help students strengthen skills taught in the classroom and tested by the TAAS. Find out more about the study guides on the back page.

The spring TAAS tests are released to the public each August after all school districts have completed testing. The released TAAS tests are available in hard copy at each campus and through the TEA Internet web site at www.tea.state.tx.us/student.assessment/.

By law, schools must provide a Campus Report Card each year to parents. Each report card contains the following information:

- academic excellence indicators (AEIS, including TAAS results and dropout rates),
- student/teacher ratios,
- administrative and instructional costs per student,
- the school's performance.

If you have access to the Internet (at home, school or your local library), the Texas Education Agency World Wide Web site provides information, data, and resources about the Texas Essential Knowledge and Skills, testing, accountability, school finance, state law, and many other areas. The web site address for the Texas Education Agency is: www.tea.state.tx.us. To see and print the TEKS, see http://www.tea.state.tx.us/resources/curric.html.

If you have additional questions about Texas public schools, feel free to contact the Texas Education Agency, 1701 North Congress Avenue, Austin, TX 78701-1494. Or call 1-800-832-1221.

In Kindergarten social studies, your child will learn:

Students:

- learn about patriotic holidays
- identify contributions of people, such as George Washington
- place events in chronological order

Students:

- locate and describe the relative location of places
- identify physical and human characteristics of places

Students:

- identify basic human needs and explain how they can be met
- identify jobs and why people have them

Students:

- identify rules and reasons for having them
- identify authority figures

Students:

- identify U.S. and Texas flags
- recite the Pledge of Allegiance

Students:

- identify similarities and differences among people
- identify family and community customs

Students:

- identify examples of technology and describe how they meet people's needs

Students:

- obtain information from a variety of oral and visual sources
- sequence and categorize information
- identify main ideas
- express ideas orally and visually
- use problem-solving and decision-making processes

In Kindergarten language arts, your child will learn:

Students:

- listen to information, rhymes, songs, conversations, and stories
- listen and talk about experiences, customs, and cultures
- make announcements, give directions, and make introductions
- act out plays, poems, and stories
- clearly request, retell, and/or describe stories and experiences
- listen responsively to contemporary and classic stories and other texts read aloud

Students:

- recognize that print represents spoken language and conveys meaning, such as their own name, and signs such as Exit and Danger
- recognize upper and lower case letters in print and understand that print represents language
- manipulate sounds in spoken words (phonemic awareness)
- decode simple words using letter-sound knowledge
- identify words that name persons, places or things, and words that name actions
- learn new vocabulary words through selections read aloud
- retell or act out important events in a story
- gather important information and ask relevant questions

Students:

- write their own name and each letter of the alphabet
- write messages using their knowledge of letters and sounds
- record or dictate questions, ideas, stories
- write labels, notes, and captions for illustrations, possessions, charts, and centers

Students of limited English proficiency (LEP) enrolled in Spanish Language Arts and/or in English as a Second Language will be expected to learn these same knowledge and skills for this grade level; however, students in Spanish Language Arts will learn these skills through their native language, and students in English as a second language will apply these skills at their proficiency level in English.

In Kindergarten mathematics, your child will learn:

Students:

- use words and numbers to describe relative sizes of objects
- describe position in a sequence of events
- name ordinal positions (first, second, etc.)
- separate a whole into equal parts
- explain half of a whole
- model addition and subtraction

Students:

- identify, extend, and create patterns
- use patterns to predict what comes next
- count to 100 by ones

Students:

- describe one object in relation to another using informal language
- place objects in a given position
- describe and identify objects
- compare and sort objects
- describe and compare solids
- recognize shapes
- describe, identify, and compare shapes

Students:

- compare and order objects by length, capacity, or weight
- identify objects greater than, less than or equal to a given object
- compare temperatures
- compare times
- sequence events
- read a calendar using days, weeks, and months

Students:

- construct real and picture graphs
- use graphs to answer questions

Students:

- identify mathematics in everyday situations
- use a problem-solving model with guidance
- select or develop an appropriate problem-solving strategy

In Kindergarten science, your child will learn:

Students:

- demonstrate safe science practices in the classroom and field
- use and conserve resources

Students:

- use their senses and common tools such as hand lenses, balances, cups, and bowls to make observations and collect information by asking questions, gathering information, communicating findings, and making informed decisions
- use computers and information technology tools to support their investigations

Students:

- describe patterns including seasons, growth, day and night, and predict what happens next, using charts and graphs
- learn how systems have basic properties that can be described in terms of parts, such as those in toys, vehicles, and construction sets
- understand structures, interactions, and processes found in systems that, when put together, can do things they cannot do by themselves

Students:

- observe, describe, and record changes in systems, cycles, and models
- record changes in size, mass, color, position, quantity, time, temperature, sound, and movement by observing weather changes and life cycles of organisms in their natural environment

Students:

- identify organisms and objects and their parts
- explore the basic needs of living organisms and give examples of their dependence on each other
- identify how the Earth provides resources for life

Students:

- observe and describe properties of rocks, soil, and water

In first grade social studies, your child will learn:

Students:

- identify contributions of people, such as Sam Houston and Thomas Edison
- describe the origins of holidays, such as Veterans Day
- identify anthems and mottoes of the state and nation
- distinguish among past, present, and future

Students:

- locate places using cardinal directions
- create and use simple maps
- locate community, state, and nation on maps and globes
- describe physical and human characteristics of places
- identify natural resources and how they are used

Students:

- identify examples of goods and services, ways people exchange them, and the role of markets in the exchange
- identify reasons for making economic choices
- describe how specialized jobs contribute to production of goods and services

Students:

- explain the need for and give examples of rules and laws
- identify and describe the roles of leaders in the community, state, and nation

Students:

- identify characteristics of good citizenship and identify historic figures and ordinary people who exemplify good citizenship
- explain patriotic symbols, such as the Liberty Bell
- recite and explain the Pledge of Allegiance and Pledge to the Texas Flag

Students:

- describe ways that families meet basic human needs
- retell stories from folktales and legends

Students:

- describe how technology has changed how families live and how people work

Students:

- sequence and categorize information
- identify main ideas
- express ideas orally and visually
- use problem-solving and decision-making processes

In first grade language arts, your child will learn:

Students:

- listen to gather information, solve problems, and enjoy and appreciate literature
- present dramatic interpretations of experiences, stories, poems, and plays
- participate in group discussions
- make announcements, give directions, and make introductions appropriately

Students:

- recognize the conventions of print (e.g., understand that print moves left to right, involves upper and lower case letters, and represents spoken language)
- manipulate sounds in spoken words (phonemic awareness) and understand that letters represent sounds (phonics)
- read and comprehend first-grade-level text fluently
- use graphs, charts, signs, and captions to acquire information
- find and connect ideas and themes in different books and other printed resources
- draw conclusions from information gathered
- self-select books and stories by drawing on personal interest, relying on knowledge of authors or types of texts

Students:

- write their own name and each letter of the alphabet
- gain increasing control of penmanship and punctuation
- compose questions, ideas, and stories
- write for different purposes, such as composing lists, letters, stories, and poems
- engage in the writing process by generating ideas before writing and developing and polishing drafts
- record or dictate questions for investigations

Students of limited English proficiency (LEP) enrolled in Spanish Language Arts and/or in English as a Second Language will be expected to learn these same knowledge and skills for this grade level; however, students in Spanish Language Arts will learn these skills through their native language, and students in English as a Second Language will apply these skills at their proficiency level in English.

In first grade mathematics, your child will learn:

Students:

- compare and order whole numbers up to 99
- create sets of tens and ones using concrete objects
- describe values of coins and their relationships
- read and write numbers to 99
- separate a whole into parts and describe the parts of a set
- describe the parts of a set of objects
- model and write addition and subtraction sentences
- learn and apply addition facts

Students:

- find patterns such as odd and even
- use place value to compare and order whole numbers
- identify fact families for addition and subtraction
- identify, describe, and extend patterns to solve problems
- skip count by twos, fives, and tens

Students:

- sort objects by attributes using informal language
- identify shapes and solids
- combine shapes to make a new shape

Students:

- estimate and measure using nonstandard units
- relate the unit to size of object
- recognize reasonable temperatures
- describe time on a clock (hours, half hours)
- order events by length of time

Students:

- collect and sort data
- construct graphs (real, picture, and bar)
- draw conclusions from graphs
- identify events as certain or impossible

Students:

- identify mathematics in everyday situations
- use a problem-solving model, with guidance as needed

In first grade science, your child will learn:

Students:

- demonstrate safe practices during classroom and field investigations
- learn how to use and conserve resources

Students:

- ask questions about organisms, objects, and events
- construct reasonable explanations using information
- explain a problem in their own words and propose a solution
- use tools, including hand lenses, clocks, computers, thermometers, and balances

Students:

- identify, predict, and create patterns, including those in charts, graphs, and numbers
- know that systems have parts and are composed of organisms and objects
- observe and describe the parts of plants and animals
- manipulate objects so that the parts are separated from the whole, which may result in the part or the whole not working

Students:

- measure changes in size, mass, color, position, quantity, sound, and movement
- observe and record weather changes from day to day and over seasons
- observe stages in the life cycle of organisms in their natural environment

Students:

- group and compare living organisms and nonliving objects

Students:

- identify characteristics of organisms that allow their basic needs to be met
- compare the ways living organisms depend on each other

Students:

- describe natural sources of water, including streams, lakes, and oceans
- observe and describe differences in rocks and soil samples
- identify how rocks, soil, and water are used and how they can be recycled

In second grade social studies, your child will learn:

Students:

- explain the significance of celebrations, such as Independence Day, and landmarks, such as state and national capitol buildings
- describe and measure calendar time
- create and interpret timelines
- name several sources of information about a given event
- compare various interpretations of the same time period
- identify contributions of people, such as Henrietta King and Robert Fulton

Students:

- use symbols, find locations, and determine directions on maps and globes
- draw maps to show places and routes
- identify major landforms and bodies of water on maps and globes
- compare information from different sources about places and regions
- identify relationships between people and their physical environment
- identify ways people can conserve and replenish natural resources

Students:

- explain how work provides income
- explain choices people have in a free enterprise system
- identify roles of producers and consumers

Students:

- identify functions of government
- identify governmental services in the community
- compare roles of public officials and identify ways they are selected

Students:

- identify characteristics of good citizenship and identify historic figures and ordinary people who exemplify good citizenship
- identify patriotic songs and symbols

Students:

- identify stories, statues, and other examples of local cultural heritage

Students:

- describe how science and technology have changed ways people meet basic needs and have changed communication, transportation, and recreation

Students:

- obtain information from a variety of sources
- use tables of contents and glossaries to locate information
- sequence and categorize information
- identify main ideas, make predictions, and compare and contrast
- express ideas orally and create written and visual material
- use problem-solving and decision-making processes

In second grade language arts, your child will learn:

Students:

- listen responsively to stories and other texts read aloud
- choose and adapt spoken language according to the audience, purpose, and occasion
- identify rhymes, repeated sounds or instances of onomatopoeia
- compare stories and other literature that reflect different regions, customs, and cultures
- ask and answer relevant questions
- make contributions to small or large group discussions
- gain increasing control of grammar, such as subject-verb agreement, complete sentences and correct tense usage

Students:

- decode using all letter sound correspondences
- use knowledge of syntax (word order) and semantics (word meaning) to identify unfamiliar words
- read and comprehend a variety of second-grade-level texts fluently
- learn new vocabulary words through wide reading
- make and explain important inferences in a story
- gather important information using resources and references
- read silently for increasing periods of time

Students:

- write to record ideas and reflections for a variety of audiences
- use more complex capitalization, punctuation, and spelling
- compose complete sentences in written texts and use appropriate end punctuation
- engage in the writing process by generating ideas and developing and polishing final copies of compositions
- identify the most effective features of a piece of writing using criteria generated by the teacher and class
- take simple notes from relevant sources, such as classroom guests, information books, and media sources

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In second grade mathematics, your child will learn:

Students:

- use number models to represent, compare, and order whole numbers
- read numbers less than 1,000
- name fractional parts of a whole or set of objects
- recall and apply basic addition facts
- add and subtract with two-digit numbers
- determine the value of a collection of coins
- model multiplication and division

Students:

- find patterns in the 100s chart
- use place value to compare and order numbers
- use patterns to remember addition facts
- solve subtraction problems using fact families
- generate ordered pairs from a real-life situation
- identify and extend a list of ordered pairs
- solve problems using patterns

Students:

- identify attributes of shapes and solids
- compare shapes and solids using attributes
- cut geometric shapes apart and identify the new shapes made
- locate and name whole numbers on a number line

Students:

- identify models for standard units of length, capacity, and weight
- measure using standard units
- describe length of an activity
- read a thermometer to gather data
- describe time on a clock (hours, minutes)

Students:

- construct picture and bar graphs
- draw conclusions and answer questions from graphs
- describe an event as more likely or less likely

Students:

- identify the mathematics in everyday situations
- use a problem-solving model
- select or develop an appropriate problem-solving strategy
- use tools such as real objects, manipulatives, and technology to solve problems
- relate informal language to mathematical language and symbols
- reason and support their thinking using objects, words, pictures, numbers, and technology

In second grade science, your child will learn:

Students:

- conduct classroom and field investigations using safe practices
- learn how to use and conserve resources

Students:

- ask questions about organisms, objects, and events
- plan and conduct simple descriptive investigations
- compare results of investigations with what students know about the world
- explain a problem and identify a task and solution related to the problem

Students:

- collect information using tools including rulers, meter sticks, measuring cups, clocks, hand lenses, computers, thermometers, and balances
- measure and compare organisms and objects

Students:

- classify organisms, objects, and events based on properties and patterns
- identify, predict, replicate, and create patterns

Students:

- know that systems have parts and are composed of organisms and objects
- identify parts that, when put together, can do things they cannot do by themselves

Students:

- observe, measure, and analyze changes, including weather, the night sky, and seasons
- identify, predict, and test uses of heat to cause change

Students:

- identify characteristics of living organisms and non-living objects

Students:

- identify external characteristics of plants and animals that allow their needs to be met
- compare the ways organisms depend on each other and on their environments

Students:

- describe the water cycle
- identify uses of natural resources

In third grade social studies, your child will learn:

Students:

- identify reasons people formed communities and describe how individuals, events, and ideas have shaped communities over time
- compare ways people in communities meet their needs, in the past and present
- create and interpret timelines and describe historical times in terms of years, decades, and centuries

Students:

- compare how people in different communities adapt to or modify variations in the physical environment
- use cardinal and intermediate directions, scale, compass rose, grid, and symbols to locate places and interpret maps and globes

Students:

- identify ways of earning, spending, and saving money
- define scarcity and give examples of its impact on goods and services and on interdependence within and among communities
- explain how supply and demand affects price and how cost of production and selling price affect profits

Students:

- describe the basic structure of local government, identify local government officials, and explain how they are chosen
- identify services commonly provided by local governments and explain how they are financed

Students:

- identify characteristics of good citizenship and identify people who exemplify good citizenship
- explain the importance of civic participation and identify examples of actions people can take to improve the community
- identify examples of organizations that serve the common good

Students:

- explain the significance of ethnic and/or cultural celebrations in the state, nation, and world
- retell the heroic deeds of real and fictional heroes who have helped to shape the culture of communities
- identify selected writers and artists whose works exemplify the cultural heritage of communities around the world

Students:

- identify scientists and inventors who have created new technology
- explain the impact of new technology on communities around the world

Students:

- apply critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes

In third grade language arts, your child will learn:

Students:

- listen to solve problems, gather information or appreciate stories
- listen to identify the musical elements of literary language, such as rhymes, repeated sounds or instances of onomatopoeia
- gain increasing control of grammar, such as subject-verb agreement, complete sentences, and correct tense usage
- compare language and oral traditions (family stories) that reflect customs, regions, and cultures

Students:

- use knowledge of decoding and structural cues such as prefixes, suffixes, and derivational endings to identify words
- read and comprehend a variety of third-grade-level texts
- read for enjoyment, to solve problems, to gather information, and to extend vocabulary
- make and explain important inferences in a story
- demonstrate knowledge of synonyms, antonyms, and multi-meaning words
- gather important information using resources and references
- analyze the literary elements of narrative text
- read orally from familiar texts with accuracy, expression, appropriate phrasing, and attention to punctuation
- read silently for increasing periods of time

Students:

- write to record ideas and reflections for a variety of audiences
- use increasingly complex capitalization, punctuation, and spelling
- develop, revise, and edit writing and compositions using established criteria
- write for varied purposes, including to achieve a sense of audience, make precise word choices, and create vivid images
- use available technology for word processing, spell checking, and printing
- compile notes into reports, outlines, and summaries

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In third grade mathematics, your child will learn:

Students:

- use place value to read, write, and describe numbers
- compare and order whole numbers less than 10,000
- determine value of a collection of coins and bills
- construct fractional models and compare fractions
- name fractional parts of a whole or set using symbols
- construct models of equivalent fractions
- model addition and subtraction
- add and subtract with numbers less than 1,000
- learn and apply multiplication facts
- multiply using a one-digit multiplier
- use models for division and record the solutions
- round numbers to tens or hundreds
- estimate sums and differences

Students:

- make predictions and solve problems using patterns
- identify patterns in multiplication facts
- identify fact families for multiplication and division
- generate tables of ordered pairs
- identify and extend patterns of ordered pairs

Students:

- name, describe, and compare shapes and solids
- identify congruent shapes
- create and identify lines of symmetry
- locate and name whole numbers and fractions on a number line

Students:

- estimate and measure length using metric and customary units
- find the perimeter of a figure
- determine area using concrete models
- tell and write time on digital and traditional clocks
- measure length, area, temperature, and time to solve problems

Students:

- collect, organize, record, and display data in picture and bar graphs
- interpret information from graphs
- describe events as more likely, less likely or equally likely

Students:

- identify the mathematics in everyday situations
- use a problem-solving model
- use tools, such as real objects, manipulatives, and technology to solve problems
- explain and record observations
- relate informal language to mathematical language and symbols
- make generalizations from patterns
- justify why an answer is reasonable and explain the solution process

In third grade science, your child will learn:

Students:
- conduct safe, environmentally appropriate, and ethical investigations
- make wise choices in use, conservation, disposal or recycling of materials

Students:
- formulate testable hypotheses and construct reasonable explanations from evidence
- construct simple graphs, tables, maps, models, and charts to organize information
- analyze scientific explanations as to their strengths and weaknesses, using scientific evidence
- evaluate the impact of research on scientific thought, society, and the environment
- study the history of science and contributions of scientists

Students:
- use tools, including calculators, safety goggles, microscopes, sound recorders, clocks, computers, hand-lenses, thermometers, meter sticks, magnets, balances, and compasses
- demonstrate that repeated investigations may increase reliability

Students:
- observe a simple system and describe the role of various parts

Students:
- measure changes in an object's position when a force is applied
- know Earth's surface can be changed by forces

Students:
- gather data about temperature, magnetism, and hardness
- identify matter as liquids, solids, and gases

Students:
- know that organisms need food, water, light, air, and habitat
- observe organisms with similar needs that compete for resources
- describe environmental changes
- describe how organisms modify their environment

Students
- analyze how adaptive characteristics help individuals survive

Students:
- identify some inherited traits of plants and animals

Students:
- classify earth materials in local area as renewable, nonrenewable or inexhaustible
- identify properties of soils, such as color and texture
- identify the position of planets in relation to the Sun

In fourth grade social studies, your child will learn:

Students:

- compare similarities and differences of Native American groups in Texas and the Western Hemisphere before European exploration
- explain causes and effects of European exploration and colonization of Texas and the Western Hemisphere
- explain causes and effects of the Texas Revolution, the Republic of Texas, and the annexation of Texas to the United States
- describe political, economic, and social changes in Texas during the last half of the 19th century
- describe important issues, events, and individuals of the 20th century in Texas

Students:

- use geographic tools to collect, analyze, and interpret data
- describe political, economic, and physical regions in Texas and the Western Hemisphere
- explain the location and patterns of settlement and the geographic factors that influence where people live in Texas
- describe how people in Texas adapt to and modify their environment

Students:

- explain basic patterns of work and economic activities of early societies in Texas
- describe the characteristics and benefits of the free enterprise system in Texas
- identify how Texas, the United States, and the world are economically interdependent

Students:

- compare how people organized governments in different ways during the early development of Texas
- identify important ideas in historic documents, such as the Texas Declaration of Independence
- explain the basic functions of the three branches of state government

Students:

- explain important customs, symbols, and celebrations of Texas
- explain the role of the individual in state and local elections
- identify leaders in state and local government and tell how to contact them

Students:

- identify the contributions of people of various racial, ethnic, and religious groups to Texas

Students:

- describe the impact of science and technology on life in Texas

Students:

- apply critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes

In fourth grade language arts, your child will learn:

Students:

- listen to gain information and supporting evidence
- monitor their understanding of a spoken message and appropriately seek clarification
- interpret speaker's messages (both verbal and nonverbal), purposes and perspectives
- monitor their own understanding of the spoken message and seek clarification as needed

Students:

- read and comprehend a variety of fourth-grade-level texts
- adjust reading rate according to the purpose for reading
- monitor their own comprehension and reread, use reference aids, search for clues, and ask questions when understanding breaks down
- use multiple reference aids, including software, to clarify and seek information
- study word meanings across content areas and through current events
- respond to readings and ideas through journal writing, discussion, and media
- paraphrase and summarize text
- represent text information by generating outlines, timelines, and graphics
- offer observations, make connections, react, speculate, interpret, and raise questions after reading

Students:

- capitalize, use punctuation, and spell correctly in "published" pieces of writing
- evaluate written compositions using assigned and established criteria
- conduct research and raise new questions for further investigation
- write to express, discover, record, develop, reflect on ideas, and problem solve
- compose journals, letters, reviews, poems, narratives, and instructions

Students:

- understand and interpret visual messages and media
- analyze and critique media
- produce visual images, messages, and meanings that communicate effectively

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In fourth grade mathematics, your child will learn:

Students:

- read, write, compare, and order whole numbers through millions
- read, write, compare, and order decimals through hundredths
- model fractions greater than one
- generate equivalent fractions using models
- compare and order fractions using concrete and picture models
- relate fractions and decimals for tenths and hundredths
- add and subtract whole numbers and decimals to hundredths
- model factors and products
- represent multiplication and division
- recall and apply multiplication facts
- multiply with two-digit multipliers
- divide with a one-digit divisor
- use addition and subtraction to solve problems
- round to ten, hundred, or thousand
- estimate products and quotients

Students:

- use patterns to remember multiplication facts
- solve division problems using fact families
- use patterns to multiply by 10 and 100
- describe the relationship between two sets of data

Students:

- use formal language for angles
- identify parallel and perpendicular lines
- describe shapes and solids with vertices, edges, and faces
- demonstrate translations, reflections, and rotations
- verify congruence and symmetry
- locate and name whole numbers, fractions, and decimals on number line

Students:

- estimate and measure weight and capacity
- measure length, perimeter, time, temperature, and area

Students:

- interpret bar graphs
- list possible outcomes of a probability experiment
- use a pair of numbers to describe the probability of an event

Students:

- identify the mathematics in everyday situations
- use a problem-solving model
- select or develop an appropriate problem-solving strategy
- explain and record observations
- relate informal language to mathematical language and symbols
- make generalizations from patterns

In fourth grade science, your child will learn:

Students:

- demonstrate safe, environmentally appropriate, and ethical practices
- learn to use and conserve, dispose and recycle resources

Students:

- plan and implement descriptive and simple investigations, ask well-defined questions, formulate hypotheses, select and use appropriate equipment and technology, collect, analyze and interpret information, observe and measure, and communicate valid conclusions
- construct graphs, tables, maps, charts to organize, examine, and evaluate information

Students:

- analyze, review, and critique scientific explanations/hypotheses/theories, including strengths and weaknesses, and draw inferences on promotional materials for products and services
- evaluate research on scientific thought, society, and the environment
- connect science concepts with history of science and contributions of scientists

Students:

- collect information, measure, and compare using tools, including safety goggles, microscopes, sound recorders, computers, hand-lenses, thermometers, meter sticks, balances, and compasses
- represent the natural world using models and analyze their limitations
- demonstrate that repeated investigations may increase the reliability of results

Students:

- identify and describe roles of organisms in living systems and parts in nonliving objects and predict and draw conclusions when part of a system is removed
- identify patterns of change and use reflection to verify symmetry

Students:

- observe and record changes in states of matter caused by heat and conduct tests, compare data, and draw conclusions about physical properties of matter-states, conduction, density, and buoyancy

Students:

- identify characteristics that allow survival and reproduction of species
- compare adaptive characteristics of species and identify and compare species that lived in the past to existing species
- distinguish inherited and learned characteristics providing examples

Students:

- identify and observe effects of events that require time for change to become noticeable

Students:

- test properties of soils, effects of oceans on land, and the Sun as our major source of energy

In fifth grade social studies, your child will learn:

Students:

- explain causes and effects of European colonization
- summarize how conflict between the American colonies and Great Britain led to American independence
- describe events that led to the creation of the U.S. Constitution
- identify important social changes of the 19th century, including the Industrial Revolution, westward expansion, and the Civil War
- describe important issues, events, and individuals of the 20th century

Students:

- use geographic tools to collect, analyze, and interpret data
- describe political, economic, and physical regions in the United States
- explain the location and patterns of settlement and the geographic factors that influence where people live in the United States
- describe how people in the United States adapt to and modify their environment

Students:

- explain basic economic patterns of early societies in the United States
- identify economic motivations for exploration and colonization
- describe the characteristics and benefits of the free enterprise system in the United States
- explain patterns of work and economic activities in Texas

Students:

- identify examples of representative government in the American colonies
- identify important ideas in the Declaration of Independence and the U.S. Constitution
- describe the framework of government created by the U.S. Constitution

Students:

- explain important customs, symbols, and celebrations that represent American beliefs
- explain the importance of individual participation in the democratic process
- identify leaders of the national government
- summarize fundamental rights of American citizens

Students:

- explain the relationship between the arts and the times during which they were created
- identify the contributions of people of various racial, ethnic, and religious groups to the United States

Students:

- describe the impact of science and technology on life in the United States

Students:

- apply critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes

In fifth grade language arts, your child will learn:

Students:

- analyze a speaker's message for content, persuasive technique, and tone
- distinguish between a speaker's opinion and verifiable fact
- listen to proficient models of oral reading of classic and contemporary works
- identify how language, such as labels and sayings, reflects regions and cultures

Students:

- read and comprehend a variety of fifth-grade-level texts
- draw inferences from text and support these conclusions and generalizations with evidence from the text
- offer observations, make connections, react, speculate, interpret, and raise questions in response to text
- generate relevant research using multiple sources of information
- demonstrate characteristics of fluent and effective reading
- use a thesaurus, synonym finder, dictionary, and software to clarify meanings and usage
- support responses to readings by referring to relevant aspects of the text and their own experiences

Students:

- compose original texts applying the conventions of capitalization, punctuation, grammar, and correct spelling
- compose, organize, and revise letters, essays, records, and research papers
- use suspense, dialogue, and figurative language in original compositions
- write to persuade, argue, and request
- engage in the writing process and refine selected drafts to publish for general and specific audiences

Students:

- describe, interpret, and use visual media to compare ideas and points of view
- analyze, critique, and contrast the messages found in visual media
- produce class newspapers, multimedia reports, and/or short films

Students of limited English proficiency (LEP) enrolled in Spanish Language Arts and/or in English as a Second Language will be expected to learn these same knowledge and skills for this grade level; however, students in Spanish Language Arts will learn these skills through their native language, and students in English as a Second Language will apply these skills at their proficiency level in English.

In fifth grade mathematics, your child will learn:

Students:

- read, write, compare, and order whole numbers through billions
- read, write, compare, and order decimals through thousandths
- generate equivalent fractions
- compare fractions in a variety of ways
- relate decimals to fractions using models to the thousandths
- add, subtract, multiply, and divide whole numbers
- add and subtract decimals
- identify prime and common factors
- model adding and subtracting fractions like denominators
- round whole numbers and decimals to tenths
- estimate to solve problems

Students:

- determine all possible combinations
- use patterns to make generalizations
- identify prime and composite numbers
- select and use diagrams and number sentences

Students:

- identify critical attributes of geometric figures or solids
- use critical attributes to define shapes and solids
- sketch translations, rotations, and reflections
- describe transformations that relate congruent figures
- graph ordered pairs of whole numbers

Students:

- measure volume using concrete models
- estimate volume in cubic units
- measure length, perimeter, weight, capacity, time, temperature, and area to solve problems and describe equivalent measures

Students:

- construct line graphs
- describe characteristics of a set of data
- graph data using the appropriate representation
- use fractions to describe results of an experiment
- use results to make predictions

Students:

- identify the mathematics in everyday situations
- use a problem-solving model that incorporates understanding the problem, making and carrying out the plan, and evaluating the solution for reasonableness
- select or develop an appropriate problem-solving strategy
- explain and record observations
- relate informal language to mathematical language and symbols
- make generalizations from patterns
- justify why an answer is reasonable and explain the solution process

In fifth grade science, your child will learn:

Students:

- demonstrate safe, environmentally appropriate, and ethical practices
- learn to use and conserve, dispose and recycle resources

Students:

- plan and implement investigations, ask well-defined questions, formulate hypotheses, select and use equipment, collect, analyze and interpret information, observe and measure, and communicate valid conclusions
- construct graphs, maps, charts to organize and evaluate information

Students:

- analyze scientific explanations as to strengths and weaknesses
- draw inferences on promotional materials
- represent the natural world using models
- evaluate research on scientific thought, society, and the environment
- connect concepts with history of science and contributions of scientists

Students:

- use scientific methods and tools, including sound recorders, computers, hand lenses, thermometers, compasses, balances, magnets, meter sticks, collecting nets, and safety goggles to collect information
- show that repeated investigations may increase reliability of results

Students:

- describe cycles, structures, interactions, and processes found in systems and life cycles
- identify events and describe changes that occur on a regular basis and the significance of water, carbon, and nitrogen cycles

Students:

- investigate physical states of matter
- describe light, sound, heat, and electricity as forms of energy
- demonstrate how some mixtures and solutions maintain physical properties of their ingredients
- differentiate forms of energy including light, heat, electrical, and solar

Students:

- explore and predict adaptations
- describe an organism's niche within an ecosystem
- examine traits that are inherited by offspring from their parents
- study examples of learned characteristics

Students:

- see that growth, erosion, and dissolving are examples of past events that have affected present events

Students:

- interpret how landforms develop
- describe processes responsible for coal, gas, and minerals
- compare physical characteristics of the Earth and Moon
- identify gravity as a force that keeps planets and the Moon in orbits